

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application, in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested.

I. Amendments to the Claims

By the foregoing amendment, claims 1-4, 46, 48, and 49 have been amended. In particular, independent claims 1-4 have been amended to indicate that the human blastocyst that is obtained in the method is a “hatched human blastocyst.” Claims 1-4 have also been amended to place the affirmative recitation that the mechanical dissection process does not involve the use of immunosurgery in proximity to, and as part of, the language of iii) so that it is clear that inner cell mass cells are isolated by mechanical dissection into pieces without the use of immunosurgery. Claims 46, 48, and 49 have been amended to delete recitation of an extraneous recitation of the term “and.” The amendments to the claims have been made without prejudice or disclaimer to any subject matter recited or canceled herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added.

II. Claim Rejections Under 35 U.S.C. § 103(a)

A. The Examiner has maintained the rejection of claims 1-3, 5, 12, 13, 16-20, 62, 64, and 65 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Thomson (2001), when taken with Thomson (1998), as evidenced by Stem Information (National Institutes of Health), when taken with Rijnders et al. (1998), and further in view of Lanzendorf et al. (2001), when taken with Reubinooff et al. (U.S. Patent No. 6,875,607). *See* OFFICE ACTION at 2-10. This rejection is respectfully traversed.

The Examiner has stated that the arguments as submitted in Applicants’ previous Amendment and Reply were not persuasive because “Applicants are arguing limitations that

are not within the scope of the claims.” OFFICE ACTION at 4. Applicants respectfully disagree. However, to expedite prosecution in the present application and not to acquiesce to the Examiner’s statements, Applicants have amended independent claim 1-4 to make clear that “isolating the inner cell mass cells by mechanical dissection into pieces,” as recited in iii), thereby isolates the inner cell mass cells without the use of immunosurgery[.]” Claims 1-4 have also been amended to indicate that the human blastocyst that is obtained in the method is a “hatched human blastocyst.”

By growing the blastocyst in an environment where they will hatch, the blastocyst hatches and thereby breaks the zona pellucida open. Applicants therefore respectfully submitted that the inventors of present application have disclosed that, by growing the blastocyst in a suitable environment and letting the blastocyst hatch, better attachment of the cells is facilitated, xeno-free conditions are allowed, and higher cell line establishment rates are obtained. However, even though the zona pellucida is broken open, the colony comprises a range of different components and cell types and is therefore a heterogeneous structure from which only the inner cell mass is isolated. Hence, in this first establishment step, a manual dissection of the structure is performed in order to isolate the inner cell mass from the remaining structures of the blastocyst by cutting only.

Moreover, the Examiner has presented insufficient evidence to satisfy the Office’s burden that it would have been obvious to the skilled artisan to substitute any method for isolation of ICM cells for another and still achieve the results of the claimed invention.

In view of the above, Applicants respectfully submit that currently pending independent claims 1-3, which are the independent claims set forth in the subject rejection, are not taught or suggested by the prior art. The Examiner’s argument for rejection of dependent claims 5, 12, 13, 16-20, 62, 64, and 65 falls for the same reasons as set forth for

independent claims 1-3. Accordingly, withdrawal of the rejection of claims 1-3, 5, 12, 13, 16-20, 62, 64, and 65 under 35 U.S.C. § 103(a) is respectfully requested.

B. The Examiner has maintained the rejection of claims 4, 9, 10, 60, and 61 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Thomson (2001), when taken with Thomson (1998), when taken with Rijnders et al. (1998) and Lanzendorf et al. (2001), in further view of Reubinoﬀ et al. (U.S. Patent No. 6,875,607), and further in view of Marshall et al. (Methods in Molecular Biology: Isolation and Maintenance of Primate Embryonic Stem Cells, 158: 11-18, January 2001). *See* OFFICE ACTION at 10-11. This rejection is respectfully traversed.

As discussed above, independent claim 4 has been amended in a manner consistent with that of independent claims 1-3. Thus, Applicants hereby incorporate by reference the same arguments made in Section II.A., *supra*.

In view of the above, withdrawal of the rejection of claims 4, 9, 10, 60, and 61 under 35 U.S.C. § 103(a) is respectfully requested.

C. The Examiner has rejected claim 11 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Thomson (2001), when taken with Thomson (1998), when taken with Rijnders et al. (1998) and Lanzendorf et al. (2001), in further view of Reubinoﬀ et al. (U.S. Patent No. 6,875,607), and further in view of Conner (2000). *See* OFFICE ACTION at 11-12. This rejection is respectfully traversed.

Applicants believe that dependent claim 11 is patentable over the art by virtue of its dependency to claim 1. Thus, withdrawal of this obviousness rejection is respectfully requested.

D. The Examiner has rejected claims 14-15 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Thomson (2001), when taken with Thomson (1998), when taken with Rijnders et al. (1998) and Lanzendorf et al. (2001), in further view of Reubinoﬀ et al.

(U.S. Patent No. 6,875,607), and further in view of Gardener et al. (1998), when taken with Gardener (1999). *See* OFFICE ACTION at 12-14. This rejection is respectfully traversed.

Applicants believe that claim 14 is patentable by virtue of its dependency to claim 1. Applicants also believe that claim 15 is patentable by virtue of its dependency to claim 14, which is dependent upon claim 1 as well. Thus, withdrawal of this obviousness rejection is respectfully requested.

E. The Examiner has maintained the rejection of claim 35 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Thomson (U.S. Patent No. 6,200,806), when taken with Stratagene Catalog, 1998, p. 39. *See* OFFICE ACTION at 14. This rejection is respectfully traversed.

Applicants believe that claim 35 is patentable by virtue of its dependency to claim 1. Thus, withdrawal of this obviousness rejection is respectfully requested.

CONCLUSION

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

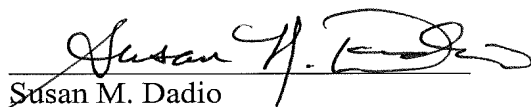
In the event that there are any questions relating to this Amendment and Reply, or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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